

## **REMARKS**

### **I. The Pending Claims and the Amendments to the Specification and Claims**

With the entry of the above amendment, Claims 12-33 are the pending claims, with Claim 12 being the only independent claim, and Claims 13-33 being the pending dependent claims. Claims 1-11 stand withdrawn in view of Applicants' election of the Group II (i.e., Claims 12-20).

As to new Claims 21-33, Applicants direct attention to Page 12 lines 5-13 of the specification as support for new Claims 21-23, which recite various percentages of recycled polyester in the barrier layer, based on total polyester present in the layer. As to new Claim 24, Applicants direct attention to Page 14 lines 18 through Page 15 line 2 as support for the recitation of the barrier layer comprising 100% of the total amount of polyester present in the barrier layer.

As to new Claims 25 and 26, which recite the intrinsic viscosity of polyester present in the barrier layer, Applicants direct attention to Page 12 lines 14-19 as support for the recited ranges of intrinsic viscosity.

As to new Claims 27 and 28, which are directed to the presence of tie layers on either side of the barrier layer, Applicants direct attention to Page 5 lines 13-21 as support for the recited presence and composition of the tie layers.

As to new Claim 29, which recites two unformed films sealed to one another to form a plurality of cell series, etc., Applicants direct attention to Page 6 lines 1-7, as support for the recited two unformed films sealed to one another, etc.

As to new Claim 30, which recites the first film as a formed film and the second film as a flat film, etc., Applicants direct attention to Page 6 lines 8-16, as support for the recited thickness range of the first and second films.

As to new Claim 31, which recites a thickness range for the first and second films, Applicants direct attention to Claim 11 (now withdrawn) and to Page 15 lines 10-18, as amended above, as support for the recited thickness range of the first and second films.

Turning next to the amendments to the specification, Applicants point out that the addition of the word “film” to the paragraph spanning Page 3 line 20 through page 4 line 10 is the correction of an obvious clerical omission of the word “film” from this sentence. The amendment to the paragraph on Page 15 lines 10-18 is the addition to the specification of film thickness ranges recited in original Claim 11, now withdrawn.

The various amendments to the claims and specification contain no new matter.

## **II. The Restriction Requirement and Applicants’ Election of Claims 12-20**

Paragraph 1 of the 24 September Office Action states that Applicant’s traversal is on the ground that the subject matter of Group I is patentable over the subject matter of Group II, with the Office Action going on to state that “such is simply not the case”.

In response, Applicants note that they have elected Group II (i.e., Claims 12-20), *without* traverse. That is, Applicants have elected Group II, withdrawn the non-elected claims, and simply pointed out the effect of the *requirement* of patentable distinctness which is inherent in *all* restriction requirements.

More particularly, the MPEP is clear that the patentable distinctness which underlies all restriction requirements necessitates that the subject matter of each of the

groups are patentable over the subject matter of each of the other groups. See MPEP 802.01:

The term “distinct” means that two or more subjects as disclosed are related, for example, as...process and product made,...but are capable of separate manufacture, use or sale as claimed , AND ARE PATENTABLE (novel and unobvious) OVER EACH OTHER (though they may each be unpatentable because of the prior art). [MPEP 802.01, emphasis *not* added.]

The above MPEP 802.01 definition of the word “distinct” shows why there are clearly estoppel ramifications to the PTO’s voluntary choice to invoke a restriction requirement. For example, if prior art teaches or suggests the subject matter of Group I but not Group II, then the PTO is estopped from asserting obviousness of Group II claims over this prior art (without more), as the PTO, in issuing the restriction requirement, has voluntarily admitted that the subject matter of Group II is patentably distinct from the subject matter of Group I. This is precisely what Applicants’ meant in the remarks accompanying the Election under 37 C.F.R. 1.143 filed 19 June 2003.

Applicants further contend that the definition of “distinct” in MPEP 802.01 overrides any contrary implication which may be made in MPEP 806.05(f):

The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process. [MPEP 806.05(g).]

Applicants note that in fact MPEP 806.05(f) is not contrary to the definition in MPEP 802.01, because the language of MPEP 806.05(f) requires a “material” difference in the product and/or process, and this *material* difference must therefore be interpreted to be a

patentable difference. Otherwise, the MPEP would be internally inconsistent, which clearly is not the case.

**III. The §103 Rejection of Claims 12-15 as Obvious over OTTAVIANO in view of FOX or KAWAKAMI further in view of PHARO or LEWICKI et al and further in view of JP '627 or EP 483,665, or CLEMENTS**

In Paragraph 4 of the 24 September 2003 Office Action, Claims 12-15 are rejected under 35 USC §103 as unpatentable over U.S. Patent No. 4,314,865, to Ottaviano ("OTTAVIANO") in view of U.S. Patent No. 3,954,368 to Kawakami ("KAWAKAMI") or U.S. Patent No. 5,116,444, to Fox ("FOX") further in view of U.S. Patent No. 5,427,830, to Pharo ("PHARO") or U.S. Patent No. 4,076,872, to Lewicki et al ("LEWICKI et al") and further in view of Japanese Patent No. 10-151627 ("JP '627") or EP 483,665 A ("EP '665") or U.S. Patent No. 5,503,790, to Clements ("CLEMENTS"). The Office Action states that OTTAVIANO teaches an inflatable dunnage material made from a multilayer film having three layers, with the exterior layers being formed from polyethylene and the interior oxygen barrier layer formed from flexible nylon, made via a coextrusion process, with the film being formed into Bubble Wrap® cellular cushioning by embossing one of the films on a vacuum embossing roller, with the second sheet being heat laminated to the first sheet to form the inflated dunnage material. The Office Action states that OTTAVIANO teaches the embossing and lamination of pre-formed films, and does not teach that the films are coextruded as part of the process, and notes that OTTAVIANO does not teach or suggest the use of recycled polyester in the film. The Office Action then relies upon KAWAKAMI or FOX for their disclosure of the use of in-line extruders for the manufacture of Bubble Wrap® cellular cushioning, and states that the combination of OTTAVIANO and KAWAKAMI or FOX still fails to teach the use of

recycled polyester. The Office Action then turns to PHARO or LEWICKI et al for the disclosure of the use of polyester in the oxygen barrier layer of a film to be used in Bubble Wrap® cellular cushioning, referring specifically to Column 8 of PHARO as disclosing the use of polyester for an air impervious film, and to Column 2 of LEWICKI et al for the disclosure of the use of polyester for making a gas impervious film. The Office Action then admits that neither PHARO nor LEWICKI et al teaches or suggests the use of recycled polyester, but relies upon JP '627, EP '483,665, and CLEMENTS for disclosure of a blend of virgin and recycled polyester for use in an extruder to make a film from the blend. The Office Action goes on to state that the ordinary artisan would have been led to use recycled polyester to reduce the cost of the overall operation, where it was known that polyester would have been a suitable alternative to nylon for an air impermeable film in the assembly as suggested by PHARO or LEWICKI et al.

In response, Applicants contend that Claims 12-15 are patentable over OTTAVIANO in view of KAWAKAMI or FOX further in view of PHARO or LEWICKI et al further in view of JP '627 or EP 483,665 or CLEMENTS. Applicants admit that OTTAVIANO teaches a three layer film used to make a thermoformed cellular cushioning product having outer polyethylene layers and an internal layer of high density high melting point nylon which is substantially impervious to the passage of gases therethrough, and Applicants admit that KAWAKAMI and FOX both teach in-line extrusion for the manufacture of cellular cushioning material. However, Applicants note that while PHARO and LEWICKI et al are both directed to thermoformed air cushioning articles and both disclose polyester for use in the films, neither of these documents appears to teach or suggest substituting polyester for the nylon layer in OTTAVIANO.

More particularly, the disclosure in PHARO which is referred to by the Office Action, i.e. Column 8 line 66 through Col. 9 line 4, does not disclose polyester as a gas barrier material, and more importantly, does not disclose polyester as a substitute for nylon. Rather, it is a mere listing of various thermoplastic polymers for use in making the film for a cellular cushioning article, which happens to include polyester:

Thousands of flat, pre-sealed bags made of thin, tough thermoplastic materials such as polyethylene, vinyl, polypropylene, polyester and numerous other air-impervious plastic film combinations, can be manufactured without being filled with air, then wound on a master roll for shipment and use at a product packaging location. [PHARO, Col 8 line 66 through Col 9 line 4]

Thus, it appears that PHARO does not distinguish polyester from polyethylene, vinyl, polypropylene, and other polymers, and notably, the Office Action does not refer to any location in PHARO which teaches or suggests any reason to substitute polyester in place of nylon. As a result, Applicants contend that the Office Action fails to point out any teaching or suggestion in PHARO which would have provided either explicit or implicit motivation to one of ordinary skill in the art to have substituted polyester for the nylon in the central layer of the film disclosed by OTTAVIANO. Without some motivation to make the substitution of polyester for nylon, there is no prima facie case of obviousness.

Turning next to the particular location in LEWICKI et al which is referred to by the Office Action, i.e. Column 2 line 28-37, Applicants point out that this passage also does not disclose polyester as substitute for nylon. Rather, in LEWICKI et al, too, there is merely a listing of various thermoplastic polymers for use in making a film for use in a cellular cushioning article:

The first embodiment of the invention is illustrated in simplified form in FIGS. 1 to 6 of the drawings. The cushioning unit 10 is preferably formed of four laminations. The uppermost sheet 1 is a thermoplastic polymeric film such as polyethylene, polypropylene, polyesters, nylon, polyvinyl chloride, polyvinylidene, polyurethane, etc., having a thickness which may range from 0.3 mil to 5 mil., or more, depending upon the intended use of the material which, of course, is gas impervious as well as abrasion and wear resistant.  
[LEWICKI et al, Col. 2 lines 28-37]

Thus, it appears that LEWICKI et al also does not distinguish polyester from polyethylene, polypropylene, nylon, etc., and notably, the Office Action does not refer to any location at which LEWICKI et al teaches or suggests substituting polyester for nylon. As a result, Applicants contend that the Office Action fails to point to any teaching or suggestion in LEWICKI et al which would have motivated one of ordinary skill in the art to substitute polyester for the nylon in the central layer of the film disclosed by OTTAVIANO. Accordingly, Applicants contend that the Office Action fails to make out a prima facie case of obviousness of any one or more of Claims 12-15 because there is no motivation to substitute the polyester of either PHARO or LEWICKI et al for any or all of the polyamide in the central layer of the film of OTTAVIANO.

Turning next to JP '627, EP '665, and CLEMENTS, Applicants admit that each of these documents discloses the use of recycled polyester in an article of manufacture. JP '627 discloses a blend of virgin and recycled PET in an extruded, laminated sheet. EP '665 discloses recycled polyester in film, injection molded products, and castings. CLEMENTS discloses the use of a blend of virgin and recycled polyester to make a crack-proof, resilient article. CLEMENTS also discloses that PET is a high cost resin, with emphasis on recycling scrap necessarily produced during thermoforming operations.

However, the Office Action does not explain how any of these documents provides any motivation to substitute recycled polyester for the nylon layer in the films of OTTAVIANO. Thus, neither PHARO nor LEWICKI et al nor JP '627 nor EP '665 nor CLEMENTS provides motivation to substitute virgin and/or recycled polyester for the polyamide of the film of OTTAVIANO. As such, the Office Action fails to establish a prima facie case of obviousness.

Furthermore, even if one of ordinary skill in the art would have turned to the teaching of PHARO or LEWICKI et al for the teaching of polyester, there no teaching in PHARO or LEWICKI et al which would be directed to any polyester other than virgin polyester. A barrier layer made from 100% virgin polyester is not satisfactory in Applicants' invention, because the melting point of the virgin polyester is too high for compatible processing with the other film layers comprising polyolefin:

It has been discovered that recycled polyester can be used as a barrier layer in a multilayer film for use in making an air cellular cushioning article. It has been discovered that recycled polyester can be coextruded as an inner layer in combination with polyolefin polymer used in the outer layers of the film. It has been found that recycled polyester can be processed (i.e., extruded, formed, etc.) about 25°F lower than the temperature at which virgin polyester can be processed. This 25°F difference in processing temperature is compatible with the processing of the polyolefin-based polymers present in the outer heat seal layers of the multilayer film. The elevated processing temperature of virgin polyester has poor compatibility properties when being processed with considerably lower melting olefin-based polymers. [Applicants' specification, Page 2, lines 12-21]

Applicants' claimed invention solves a problem which is not appreciated by any one or more of OTTAVIANO, FOX, KAWAKAMI, PHARO, LEWIECKI et al, JP '627 EP '665, or CLEMENTS. Applicants' claims require that the outer layers of the films contain an olefin-based polymer. The olefin-based polymer has a significantly lower



melting point than virgin polyester. There is no teaching or suggestion in any one or more of OTTAVIANO, FOX, KAWAKAMI, PHARO, LEWIECKI et al, JP '627 EP '665, or CLEMENTS to utilize the lower melting point of recycled polyester to make a polyester-containing barrier layer which can be processed compatibly with the olefin-based outer layers of the film recited in Applicants' claims. Applicants contend that their combination of recycled polyester in the barrier layer of a film having outer layers comprising an olefin-based polymer, for use in making a cellular cushioning article, is a combination of features which is nonobvious over the references relied upon in the Office Action, and accordingly, Claims 12-15 are patentable over the prior art.

**IV. The §103 Rejection of Claims 16-18 as Obvious over OTTAVIANO in view of FOX or KAWAKAMI further in view of PHARO or LEWICKI et al, further in view of JP '627 or EP 483,665, or CLEMENTS, and further in view of CHAVANNES '387**

In Paragraph 5 of the 24 September 2003 Office Action, Claims 16-18 are rejected under 35 USC §103 as unpatentable over OTTAVIANO in view of FOX or KAWAKAMI, further in view of PHARO or LEWICKI et al, further in view of JP '627 or EP '665 or CLEMENTS, and further in view of U.S. Patent No. 3,294,387, to Chavannes ("CHAVANNES"). The Office Action refers to Figures 5 and 23 of CHAVANNES as disclosing both films as being embossed prior to joining.

In response, Applicants contend that Claims 16-18 are patentable over OTTAVIANO in view of FOX or KAWAKAMI, further in view of PHARO or LEWICKI et al, further in view of JP '627 or EP '665 or CLEMENTS, and further in view CHAVANNES for at least the reasons that Claims 12-15 are patentable over these references.

**V. The §103 Rejection of Claims 19 and 20 as Obvious over OTTAVIANO, in view of FOX or KAWAKAMI, further in view of PHARO or LEWICKI et al, further in view of JP '627 or EP 483,665, or CLEMENTS, and further in view of MATARASSO or DELUCA et al or SIMHAE or LARSON**

In Paragraph 6 of the 24 September 2003 Office Action, Claims 19 and 20 are rejected under 35 USC §103 as unpatentable over OTTAVIANO in view of FOX of KAWAKAMI, further in view of PHARO or LEWICKI et al, further in view of JP '627 or EP '665 or CLEMENTS, further in view of U.S. Patent No. 2002/0094393 to Matarasso ("MATARASSO") or U.S. Patent No. 6,410,119 to DeLuca et al (DELUCA et al") or U.S. Patent No. 6,423,166, to Simhae ("SIMHAE") or U.S. Patent No. 4,096,306, to Larson ("LARSON"). The Office Action states that OTTAVIANO, FOX, KAWAKAMI, PHARO, LEWICKI et al, and CLEMENTS are relied on as in the rejection of Claims 12-15, and that MATARASSO, DELUCA et al, SIMHAE, and LARSON each suggest a cushioning material laminated assembly which requires inflation after formation, and that such a cushioning material was well known at the time of Applicants' invention, and that such a product would have been provided in order to reduce shipping costs of the finished assembly, and that the article would have individual pockets and/or bubbles connected by channels.

In response, Applicants contend that Claims 19 and 20 are patentable over OTTAVIANO in view of KAWAKAMI or FOX, further in view of PHARO or LEWICKI et al and further in view of JP '627 or EP '665 or CLEMENTS, and further in view of MATARASSO, DELUCA et al, SIMHAE, and LARSON for at least the same reasons that Claims 12-15 are patentable over these references, as set forth in section III above.

## VI. CONCLUSION

Entry of the above amendments and reconsideration of the patentability of Claims 12-31 is respectfully requested, with a view towards allowance, in view of the above amendments and remarks.

Respectfully Submitted,



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